The “Job Talk” Talk
Collected wisdom on the academic job hunt

Thomas Wenisch

Special thanks to: Anastasia Ailamaki, Doug Burger, Babak Falsafi, Mark Hill, James Hoe, Andreas Moshovos, Todd Mowry
What this talk is about

Preparing for academic interviews

– Application process
– The all-important “Job Talk”
– Other tips, tricks & collected wisdom

Geared towards tenure-track positions
at top-40 research institutions
Who should be here

Anyone considering academia ...

... whether you graduate soon or not

If there is any chance you want academic job,

make academia your focus

– Preparing for academia also prepares for industry
– But, not necessarily the converse
What to remember (if you forget the rest)

- Planning starts **2-3 years** before you graduate
- Application packet has 1 goal: **get an interview**
- Job Talk must target **broad audience**, not experts in your field
- 1-on-1’s are about **personality, rapport & potential for collaboration**
Outline

• Preparing for the job market...
  – Early preparation
  – Your application packet

• The interview
  – Preliminaries
  – The Job Talk
  – One-on-one meetings
Early preparation

A great application rests on 3 fundamentals:

- Strong publication record
- Dissertation impact is easy to grasp
- Outstanding letters of recommendation

⚠️ Your last year is too late to fix these
Early preparation strategies (1)

• Choose a dissertation that:
  – Rests on clear motivation
  – Demonstrates technical competence
  – Includes academic rigor

• Get strong letter writers:
  – Via internships (target former academics)
  – By inviting thesis committee members
Early preparation strategies (2)

Achieve visibility in your community

– Go to conferences
  • Give talks
  • Ask questions at talks
  • Skip the talks and hang out in the hallway
  • Introduce yourself to faculty
  • Don’t hang out with students from your university

– Lead author on more papers
– Maintain an informative personal website

Your goal: everyone should know your name
Your Application Packet

Objective: Get an interview

1. Cover letter
2. Curriculum Vitae
3. Research statement
4. Teaching statement
5. Diversity statement (sometimes)
6. Sample papers (sometimes)
7. Letters of recommendation (guide for letter writers)

Find my packet at http://www.eecs.umich.edu/~twenisch/
Cover Letter

Example outline:

¶1: who you are, what position, when you graduate
¶2: your future research interests
¶3: your past research accomplishments
¶4: your teaching experience
¶5: fluffy closing paragraph

Customize for each application
Curriculum Vitae

Emphasize:
- Research interests
- Education
- Honors/awards
- Publications

Unlike resume, CV can be arbitrarily long
- But make it easy to navigate
Research Statement

Part 1 – Your past research contributions

– Single narrative, not laundry list
– Focus on impact
– Cite your publications

Part 2 – Your research plan

– A plausible 5-year plan with concrete initial steps
– Focus on impact, breadth, diversification from thesis
– Not a commitment

Objective: demonstrate vision and planning
Teaching Statement

For research institutions:

– Summary of teaching experience
– List of topics/classes you can teach
– Some well-written fluffy teaching philosophy

For teaching institutions:

– Summary of teaching experience
– Thorough educational philosophy
– Innovative teaching approach/plan
Diversity Statement

Discuss:

– Past contributions to diversity, equity, inclusion
– Approaches to address diverse audience
– More than just teaching
– Specific anecdotes are better than platitudes
  • Generalizations can backfire as insincere lip-service

Resources:

Letter Writer Guide

Observations:

• Writing good letters is hard
• Your recommenders are fundamentally lazy

You must ease their writing burden!

Provide letter writer guide

• Bullets summarizing your contributions
• Notable activities/experiences
Applying (1)

Ignore department hiring priorities

In fact, apply even if they aren’t hiring

- Priorities are negotiated by committees that never agree
- You may be a “target of opportunity”
- Top departments care about quality, not research area
Applying (2)

Identify your champion

You only get an interview if an insider pushes your case

- Send a personal message to faculty you know...
- ...or have your advisor send one
- Politely ask about the status of your case (mid Feb.)
- See advice on pressing the flesh at conferences
Outline

• Preparing for the job market...
  – Early preparation
  – Your application packet

• The interview
  – Preliminaries
  – The Job Talk
  – One-on-one meetings
Interview structure

• Job talk
  – 60 minute presentation, including questions
  – The most critical element of the interview
• 1-on-1 interviews
  – 30-60 minutes technical discussion
• Student meeting
  – Always ask for a student meeting
• Dinner
  – Don’t be fooled – this is part of the interview
The scheduling game

• Academic interview season (noun): *a multiplayer game with hidden valuation functions and hidden information*
  – Your scheduling objectives
    • 1-2 “practice” interviews
    • Favored schools in the middle of the season
  – Their scheduling objectives
    • Strong schools: see every candidate before deciding
    • Weaker schools: pressure you into quick decision
The Job Talk

The primary goal of your job talk:

Convince faculty who are not in your area that you should be hired

If those in your area didn’t like you, you wouldn’t have an interview
Other objectives

• Show teaching ability
  – 1-2 slides “teach” background that experts know

• Show intellectual rigor
  – Include theoretical or analytic component

• Show experimental/implementation skills
  – Describe strong methods, substantial engineering

Show that you are multi-dimensional researcher
Timing

Thou shalt finish on time...
...regardless of how often they interrupt

- Don’t go over 60 minutes
- Try to leave time for questions at the end
- Skip slides if needed
- Use strategies to forestall excessive interruptions

Running over is a showstopper in some depts.
What to talk about

Your talk should be a single narrative...
...not a list of everything you’ve done

- Cover only one project in depth
- Advertise other work at the end
- Typically, should be about your dissertation
- Cite your papers in your talk (advertise top-tier publications)
Talk structure

Part 1 – Introduction

• Address broad audience
  – Target to undergrad-level knowledge
• Emphasize motivation, impact
• Good opportunity to demonstrate teaching
Talk structure

Part 2 – Body

• Address entire faculty
  – Assume only a passing familiarity with the field
Part 3 – Detail

• Address domain experts
  – Target a typical conference audience
  – But, ensure non-experts can understand impact

• Demonstrate rigor, technical depth
Conclusion

- Jump back to highest level
  - Back to targeting undergrads
Talk structure

Other Contributions & Research Plan

- One-slide ads for other major contributions
- Motivation/vision of your 5-yr. research plan
- **Specific** next research steps (e.g., 1-2 yrs.)

Your objective: seed topics for 1-on-1 meetings
One-on-One Interviews (1)

Master your elevator pitch

• 3 minute version of your job talk
  – Many faculty miss the talk, want a recap
  – The magic is to keep it fresh, not canned

Know who you are meeting

• Study their web pages the night before
Interview objective is one of:
• If research collaboration is plausible, establish potential for collaboration
• If collaboration would seem contrived, try to achieve “mutual appreciation” of research significance
What to remember (if you forget the rest)

- Planning starts **2-3 years** before you graduate
- Application packet has 1 goal: get an interview
- Job Talk must target **broad audience**, not experts in your field
- 1-on-1’s are about **personality, rapport & potential for collaboration**